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SEQ ID NO:02 MLLTKPYLSNSLLPVPSPPPSGPTLSSNHASPLAAPTCR-RSRLRISATSTAAPSPSS SEQ ID NO:04 MLLAKPHLSSSSF-LPSTRVSSPAPGPNHAKPIAASPAP-RRCLRLAVTSAAAPAASS SEQ ID NO:06 MMAGAAKTLTNLCPSFPFPTKPQNQLTTSHAFPSTRLRHRAISAVANAAQPPLA SEQ ID NO:08 MLLTKPHPALTLPSASLPNPNLKAARVRPLASSAPHGRRGLRVSASSSSLAP SEQ ID NO:12 MXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	AE AA
+ **++** * * * * * * * * * * * * * * *	PV PV PV PV
SEQ ID NO:11 VVHGGGPEINTWLDKVGIEPQFKDGLRVTDAATMDIVEMVLVGRVNKELVNLINQAGG SEQ ID NO:02 LVHGGGPEINSWLLRVGVEPQFRDGLRVTDALTMEVVEMVLVGKVNKNLVSLINIAGG: SEQ ID NO:04 LVHGGGPEINSWLLRVGVEPQFRNGLRVTDALNMEVVEMVLVRKVNKELLSLIKLPGG: SEQ ID NO:06 LVHGGGPEINSWLGRLNIPAVFRDGLRVTDADTMEIVSMVLVGKVNKTLVSLINKAGA: SEQ ID NO:08 LVHGGGPEINSWLQRVGVXPQFRNGLRVTXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	KA TA SA TA

SEQ ID NO:11 MSSTQDYIGE-----

(57) Abstract

This invention relates to an isolated nucleic acid fragment encoding an N-acetylglutamate kinase. The invention also relates to the construction of a chimeric gene encoding all or a portion of the N-acetylglutamate kinase, in sense or antisense orientation, wherein expression of the chimeric gene results in production of altered levels of the N-acetylglutamate kinase in a transformed cell host.